Legend

- Sample Location
- Existing Road
- Existing Pad Limit of Disturbance

AP 21-20-695
Arsenic Background Sample Location Map
T6S R95W, Section 20

June 2, 2015

WPXENERGY

T:\Projects\PIC_MultiProspect\Ongoing\ArsenicSampling\PA 22-21.mxd atankers 10/5/2011 3:11:46 PM

11-May-2015

Karolina Blaney
WPX Energy Rocky Mountain, LLC
1058 Country Rd 215
Parachute, CO 81635

Re: **AP 21-20-695 Cuttings** Work Order: **1505262**

Dear Karolina,

ALS Environmental received 1 sample on 06-May-2015 10:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 22.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Chad Whelton

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Certificate No: MN 532786

Report of Laboratory Analysis

ALS Group USA, Corp

Date: 11-May-15

Client: WPX Energy Rocky Mountain, LLC
Project: AP 21-20-695 Cuttings
Work Order: **1505262**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1505262-01	AP 21-20-695 cuttings	Soil		5/4/2015 13:30	5/6/2015 10:00	☐

ALS Group USA, Corp

Date: 11-May-15

Client: WPX Energy Rocky Mountain, LLC
Project: AP 21-20-695 Cuttings
Work Order: 1505262

Case Narrative

Batch 70741, Method ICP_6010_S, Sample 1505262-01A MS/MSD: The MS and MSD recoveries were outside of the control limits for Barium and Zinc; however, the results in the parent sample are greater than 4x the spike amount. No qualification is required.

Batch 70741, Method ICP_6010_S, Sample 1505262-01A MS/MSD: The MS and MSD recovery was above the upper control limit for Chromium. The corresponding result in the parent sample may be biased high.

Batch 70741, Method ICP_6010_S, Sample 1505262-01A MS/MSD: The MS and MSD recovery was below the lower control limit for Lead. The corresponding result in the parent sample may be biased low.

ALS Group USA, Corp

Date: 11-May-15

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and PQL, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	
s.u.	Standard Units

ALS Group USA, Corp

Date: *11-May-15*

Client: WPX Energy Rocky Mountain, LLC
Project: AP 21-20-695 Cuttings
Work Order: 1505262
Sample ID: AP 21-20-695 cuttings
Lab ID: 1505262-01
Collection Date: 5/4/2015 01:30 PM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3541 / 5/6/15	Analyst: **IT**
DRO (C10-C28)	**120**		**5.2**	**mg/Kg-dry**	1	5/6/2015 09:29 PM
Surr: 4-Terphenyl-d14	*83.2*		*39-133*	*%REC*	1	5/6/2015 09:29 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015D**		Prep: SW5035 / 5/6/15	Analyst: **IT**
GRO (C6-C10)	**22**		**3.1**	**mg/Kg-dry**	1	5/6/2015 08:50 PM
Surr: Toluene-d8	*103*		*50-150*	*%REC*	1	5/6/2015 08:50 PM
MERCURY BY CVAA			**SW7471B**		Prep: SW7471 / 5/6/15	Analyst: **LR**
Mercury	**0.027**		**0.015**	**mg/Kg-dry**	1	5/6/2015 03:55 PM
METALS ANALYSIS BY ICP			**SW846 6010C**		Prep: SW3050B / 5/6/15	Analyst: **JEC**
Arsenic	**12**		**0.40**	**mg/Kg-dry**	1	5/6/2015 03:59 PM
Barium	**6,100**		**4.0**	**mg/L-dry**	10	5/6/2015 05:21 PM
Cadmium	ND		0.81	mg/Kg-dry	1	5/6/2015 03:59 PM
Chromium	**13**		**0.40**	**mg/Kg-dry**	1	5/6/2015 03:59 PM
Copper	**20**		**0.81**	**mg/Kg-dry**	1	5/6/2015 03:59 PM
Lead	**18**		**0.40**	**mg/Kg-dry**	1	5/6/2015 03:59 PM
Nickel	**19**		**0.40**	**mg/Kg-dry**	1	5/6/2015 03:59 PM
Selenium	ND		0.81	mg/Kg-dry	1	5/6/2015 03:59 PM
Silver	ND		0.40	mg/Kg-dry	1	5/6/2015 03:59 PM
Zinc	**64**		**0.81**	**mg/Kg-dry**	1	5/6/2015 03:59 PM
SOLUBLE CATIONS FOR SAR			**SW846 6010C**		Prep: USDA Method 20B / 5/8/15	Analyst: **JEC**
Calcium	**62**		**5.0**	**mg/L**	10	5/8/2015 02:35 PM
Magnesium	**24**		**2.0**	**mg/L**	10	5/8/2015 02:35 PM
Sodium	**680**		**2.0**	**mg/L**	10	5/8/2015 02:35 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 5/8/15	Analyst: **JEC**
Sodium Adsorption Ratio	**19**		**0.010**	**none**	1	5/8/2015
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW846 8270D**		Prep: SW3541 / 5/6/15	Analyst: **RS**
Acenaphthene	ND		8.3	µg/Kg-dry	1	5/7/2015 04:50 AM
Anthracene	ND		8.3	µg/Kg-dry	1	5/7/2015 04:50 AM
Benzo(a)anthracene	ND		8.3	µg/Kg-dry	1	5/7/2015 04:50 AM
Benzo(a)pyrene	ND		8.3	µg/Kg-dry	1	5/7/2015 04:50 AM
Benzo(b)fluoranthene	ND		8.3	µg/Kg-dry	1	5/7/2015 04:50 AM
Benzo(g,h,i)perylene	ND		8.3	µg/Kg-dry	1	5/7/2015 04:50 AM
Benzo(k)fluoranthene	ND		8.3	µg/Kg-dry	1	5/7/2015 04:50 AM
Chrysene	ND		8.3	µg/Kg-dry	1	5/7/2015 04:50 AM
Dibenzo(a,h)anthracene	ND		8.3	µg/Kg-dry	1	5/7/2015 04:50 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *11-May-15*

Client: WPX Energy Rocky Mountain, LLC
Project: AP 21-20-695 Cuttings
Work Order: 1505262
Sample ID: AP 21-20-695 cuttings
Lab ID: 1505262-01
Collection Date: 5/4/2015 01:30 PM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluoranthene	ND		8.3	µg/Kg-dry	1	5/7/2015 04:50 AM
Fluorene	ND		8.3	µg/Kg-dry	1	5/7/2015 04:50 AM
Indeno(1,2,3-cd)pyrene	ND		8.3	µg/Kg-dry	1	5/7/2015 04:50 AM
Naphthalene	ND		8.3	µg/Kg-dry	1	5/7/2015 04:50 AM
Pyrene	ND		8.3	µg/Kg-dry	1	5/7/2015 04:50 AM
Surr: 2-Fluorobiphenyl	*74.1*		*12-100*	*%REC*	1	5/7/2015 04:50 AM
Surr: 4-Terphenyl-d14	*109*		*25-137*	*%REC*	1	5/7/2015 04:50 AM
Surr: Nitrobenzene-d5	*93.1*		*37-107*	*%REC*	1	5/7/2015 04:50 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 5/6/15	Analyst: **LSY**
Benzene	**38**		**38**	**µg/Kg-dry**	1	5/6/2015 06:02 PM
Ethylbenzene	ND		38	µg/Kg-dry	1	5/6/2015 06:02 PM
m,p-Xylene	**77**		**75**	**µg/Kg-dry**	1	5/6/2015 06:02 PM
o-Xylene	ND		38	µg/Kg-dry	1	5/6/2015 06:02 PM
Toluene	**88**		**38**	**µg/Kg-dry**	1	5/6/2015 06:02 PM
Xylenes, Total	ND		110	µg/Kg-dry	1	5/6/2015 06:02 PM
Surr: 1,2-Dichloroethane-d4	*108*		*70-130*	*%REC*	1	5/6/2015 06:02 PM
Surr: 4-Bromofluorobenzene	*105*		*70-130*	*%REC*	1	5/6/2015 06:02 PM
Surr: Dibromofluoromethane	*93.2*		*70-130*	*%REC*	1	5/6/2015 06:02 PM
Surr: Toluene-d8	*100*		*70-130*	*%REC*	1	5/6/2015 06:02 PM
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep: USDA Method 20B / 5/8/15	Analyst: **JB**
Electrical Conductivity @ Saturation	**4.1**		**0.050**	**mmhos/cm @2**	10	5/8/2015 03:30 PM
CHROMIUM, TRIVALENT			**CALCULATION**			Analyst: **JB**
Chromium, Trivalent	**13**		**0.63**	**mg/Kg-dry**	1	5/8/2015 04:30 PM
CHROMIUM, HEXAVALENT			**SW7196A**		Prep: SW3060A / 5/7/15	Analyst: **MB**
Chromium, Hexavalent	ND		1.2	mg/Kg-dry	1	5/8/2015 11:00 AM
MOISTURE			**E160.3M**			Analyst: **EVB**
Moisture	**20**		**0.050**	**% of sample**	1	5/6/2015 07:50 PM
PH			**SW9045D**		Prep: EXTRACT / 5/7/15	Analyst: **JB**
pH	**8.3**			**s.u.**	1	5/7/2015 11:00 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 11-May-15

Client: WPX Energy Rocky Mountain, LLC

QC BATCH REPORT

Work Order: 1505262

Project: AP 21-20-695 Cuttings

Batch ID: **70716** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-70716-70716** Units: **mg/Kg** Analysis Date: **5/6/2015 08:34 PM**

Client ID: Run ID: **GC8_150506A** SeqNo: **3262621** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	5.0								
Surr: 4-Terphenyl-d14	*1.741*	0	*2*	0	*87.1*	*39-133*	0			

LCS Sample ID: **DLCSS1-70716-70716** Units: **mg/Kg** Analysis Date: **5/6/2015 09:02 PM**

Client ID: Run ID: **GC8_150506A** SeqNo: **3262622** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	195.1	5.0	200	0	97.5	61-109	0			
Surr: 4-Terphenyl-d14	*1.57*	0	*2*	0	*78.5*	*39-133*	0			

MS Sample ID: **1505209-03C MS** Units: **mg/Kg** Analysis Date: **5/7/2015 03:33 PM**

Client ID: Run ID: **GC8_150507A** SeqNo: **3266202** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	355.9	8.1	322.1	57.87	92.5	48-110	0			
Surr: 4-Terphenyl-d14	*2.632*	0	*3.221*	0	*81.7*	*39-133*	0			

MSD Sample ID: **1505209-03C MSD** Units: **mg/Kg** Analysis Date: **5/7/2015 04:00 PM**

Client ID: Run ID: **GC8_150507A** SeqNo: **3266203** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	316.5	7.9	314.2	57.87	82.3	48-110	355.9	11.7	30	
Surr: 4-Terphenyl-d14	*2.533*	0	*3.142*	0	*80.6*	*39-133*	2.632	*3.85*	*30*	

The following samples were analyzed in this batch: 1505262-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy Rocky Mountain, LLC
Work Order: 1505262
Project: AP 21-20-695 Cuttings

QC BATCH REPORT

Batch ID: **70721** Instrument ID **GC9** Method: **SW8015D**

MBLK Sample ID: **MBLK-70721-70721** Units: **µg/Kg** Analysis Date: **5/6/2015 08:25 PM**
Client ID: Run ID: **GC9_150506A** SeqNo: **3262941** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
Surr: Toluene-d8	*5092*	0	*5000*	0	*102*	*50-150*	0			

LCS Sample ID: **LCS-70721-70721** Units: **µg/Kg** Analysis Date: **5/6/2015 07:14 PM**
Client ID: Run ID: **GC9_150506A** SeqNo: **3262940** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	462500	2,500	500000	0	92.5	70-130	0			
Surr: Toluene-d8	*4100*	0	*5000*	0	*82*	*50-150*	0			

MS Sample ID: **1505056-01A MS** Units: **µg/Kg** Analysis Date: **5/6/2015 11:20 PM**
Client ID: Run ID: **GC9_150506A** SeqNo: **3262983** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	568200	2,500	500000	25470	109	70-130	0			
Surr: Toluene-d8	*4054*	0	*5000*	0	*81.1*	*50-150*	0			

MSD Sample ID: **1505056-01A MSD** Units: **µg/Kg** Analysis Date: **5/6/2015 11:45 PM**
Client ID: Run ID: **GC9_150506A** SeqNo: **3262984** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	625700	2,500	500000	25470	120	70-130	568200	9.64	30	
Surr: Toluene-d8	*4715*	0	*5000*	0	*94.3*	*50-150*	4054	*15.1*	*30*	

The following samples were analyzed in this batch: 1505262-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy Rocky Mountain, LLC
Work Order: 1505262
Project: AP 21-20-695 Cuttings

QC BATCH REPORT

Batch ID: **70735** Instrument ID **HG1** Method: **SW7471B**

MBLK Sample ID: **MBLK-70735-70735** Units: **mg/Kg** Analysis Date: **5/6/2015 03:43 PM**
Client ID: Run ID: **HG1_150506A** SeqNo: **3261830** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.020								

LCS Sample ID: **LCS-70735-70735** Units: **mg/Kg** Analysis Date: **5/6/2015 03:45 PM**
Client ID: Run ID: **HG1_150506A** SeqNo: **3261832** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1808	0.020	0.1665	0	109	80-120	0			

MS Sample ID: **1505268-02BMS** Units: **mg/Kg** Analysis Date: **5/6/2015 04:01 PM**
Client ID: Run ID: **HG1_150506A** SeqNo: **3261914** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1104	0.012	0.1035	0.002871	104	75-125	0			

MSD Sample ID: **1505268-02BMSD** Units: **mg/Kg** Analysis Date: **5/6/2015 04:04 PM**
Client ID: Run ID: **HG1_150506A** SeqNo: **3261915** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1124	0.013	0.1044	0.002871	105	75-125	0.1104	1.86	35	

The following samples were analyzed in this batch: 1505262-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy Rocky Mountain, LLC
Work Order: 1505262
Project: AP 21-20-695 Cuttings

QC BATCH REPORT

Batch ID: **70740** Instrument ID **ICP2** Method: **SW846 6010C**

DUP Sample ID: **1505262-01ADUP** Units: **mg/L** Analysis Date: **5/8/2015 02:40 PM**
Client ID: **AP 21-20-695 cuttings** Run ID: **ICP2_150508A** SeqNo: **3266290** Prep Date: **5/8/2015** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	68.49	5.0	0	62.38	0	0-0	0			
Magnesium	26.7	2.0	0	24.08	0	0-0	0			
Sodium	725.5	2.0	0	679.9	0	0-0	0			

DUP Sample ID: **1505262-01ADUP** Units: **none** Analysis Date: **5/8/2015**
Client ID: **AP 21-20-695 cuttings** Run ID: **SAR_150508A** SeqNo: **3266374** Prep Date: **5/8/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	18.83	0.010	0	0	0		18.53	1.63	50	

The following samples were analyzed in this batch: 1505262-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy Rocky Mountain, LLC
Work Order: 1505262
Project: AP 21-20-695 Cuttings

QC BATCH REPORT

Batch ID: **70741** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK Sample ID: **MBLK-70741-70741** Units: **mg/L** Analysis Date: **5/6/2015 03:48 PM**
Client ID: Run ID: **ICP2_150506A** SeqNo: **3262061** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.50								
Chromium	0.01105	0.25								J
Copper	ND	0.50								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.50								
Silver	ND	0.25								
Zinc	ND	0.50								

LCS Sample ID: **LCS-70741-70741** Units: **mg/L** Analysis Date: **5/6/2015 03:54 PM**
Client ID: Run ID: **ICP2_150506A** SeqNo: **3262062** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	5.015	0.25	5	0	100	80-120	0			
Barium	5.178	0.25	5	0	104	80-120	0			
Cadmium	4.796	0.50	5	0	95.9	80-120	0			
Chromium	5.46	0.25	5	0	109	80-120	0			
Copper	5.199	0.50	5	0	104	80-120	0			
Lead	5.233	0.25	5	0	105	80-120	0			
Nickel	5.097	0.25	5	0	102	80-120	0			
Selenium	5.273	0.50	5	0	105	80-120	0			
Silver	4.749	0.25	5	0	95	80-120	0			
Zinc	5.259	0.50	5	0	105	80-120	0			

MS Sample ID: **1505262-01AMS** Units: **mg/Kg** Analysis Date: **5/6/2015 04:05 PM**
Client ID: **AP 21-20-695 cuttings** Run ID: **ICP2_150506A** SeqNo: **3262064** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	14.87	0.32	6.443	9.329	86.1	75-125	0			
Barium	4631	0.32	6.443	4634	-46.7	75-125	0			SEO
Cadmium	7.645	0.64	6.443	0.1045	117	75-125	0			
Chromium	19.37	0.32	6.443	10.19	143	75-125	0			S
Copper	24.02	0.64	6.443	16.03	124	75-125	0			
Lead	15.67	0.32	6.443	14.54	17.5	75-125	0			S
Nickel	21.85	0.32	6.443	14.77	110	75-125	0			
Selenium	7.174	0.64	6.443	-0.1049	113	75-125	0			
Silver	6.592	0.32	6.443	-0.02338	103	75-125	0			
Zinc	61.41	0.64	6.443	50.74	166	75-125	0			SO

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy Rocky Mountain, LLC
Work Order: 1505262
Project: AP 21-20-695 Cuttings

QC BATCH REPORT

Batch ID: **70741** Instrument ID **ICP2** Method: **SW846 6010C**

MSD Sample ID: **1505262-01AMSD** Units: **mg/Kg** Analysis Date: **5/6/2015 04:11 PM**
Client ID: **AP 21-20-695 cuttings** Run ID: **ICP2_150506A** SeqNo: **3262065** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	16.21	0.32	6.435	9.329	107	75-125	14.87	8.59	20	
Barium	4811	0.32	6.435	4634	2750	75-125	4631	3.82	20	SEO
Cadmium	6.708	0.64	6.435	0.1045	103	75-125	7.645	13.1	20	
Chromium	18.45	0.32	6.435	10.19	128	75-125	19.37	4.89	20	S
Copper	23.4	0.64	6.435	16.03	115	75-125	24.02	2.61	20	
Lead	16.66	0.32	6.435	14.54	33	75-125	15.67	6.16	20	S
Nickel	22.34	0.32	6.435	14.77	118	75-125	21.85	2.21	20	
Selenium	7.187	0.64	6.435	-0.1049	113	75-125	7.174	0.175	20	
Silver	6.709	0.32	6.435	-0.02338	105	75-125	6.592	1.76	20	
Zinc	63.49	0.64	6.435	50.74	198	75-125	61.41	3.34	20	SO

The following samples were analyzed in this batch: 1505262-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy Rocky Mountain, LLC
Work Order: 1505262
Project: AP 21-20-695 Cuttings

QC BATCH REPORT

Batch ID: **70715** Instrument ID **SVMS5** Method: **SW846 8270D**

MBLK Sample ID: **SBLKS1-70715-70715** Units: **µg/Kg** Analysis Date: **5/7/2015 01:45 PM**
Client ID: Run ID: **SVMS5_150507A** SeqNo: **3263632** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(g,h,i)perylene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
Surr: 2-Fluorobiphenyl	*1427*	0	*1667*	0	*85.6*	*12-100*	0			
Surr: 4-Terphenyl-d14	*2034*	0	*1667*	0	*122*	*25-137*	0			
Surr: Nitrobenzene-d5	*1750*	0	*1667*	0	*105*	*37-107*	0			

LCS Sample ID: **SLCSS1-70715-70715** Units: **µg/Kg** Analysis Date: **5/7/2015 02:08 PM**
Client ID: Run ID: **SVMS5_150507A** SeqNo: **3263633** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	511.7	6.7	666.7	0	76.7	45-110	0			
Anthracene	604.7	6.7	666.7	0	90.7	55-105	0			
Benzo(a)anthracene	659.7	6.7	666.7	0	98.9	50-110	0			
Benzo(a)pyrene	650.7	6.7	666.7	0	97.6	50-110	0			
Benzo(b)fluoranthene	636	6.7	666.7	0	95.4	45-115	0			
Benzo(g,h,i)perylene	618.3	6.7	666.7	0	92.7	40-125	0			
Benzo(k)fluoranthene	623	6.7	666.7	0	93.4	45-115	0			
Chrysene	658	6.7	666.7	0	98.7	55-110	0			
Dibenzo(a,h)anthracene	581.3	6.7	666.7	0	87.2	40-125	0			
Fluoranthene	627	6.7	666.7	0	94	55-115	0			
Fluorene	537.7	6.7	666.7	0	80.6	50-110	0			
Indeno(1,2,3-cd)pyrene	613	6.7	666.7	0	91.9	40-120	0			
Naphthalene	474	6.7	666.7	0	71.1	40-105	0			
Pyrene	696	6.7	666.7	0	104	45-125	0			
Surr: 2-Fluorobiphenyl	*1195*	0	*1667*	0	*71.7*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1825*	0	*1667*	0	*109*	*25-137*	0			
Surr: Nitrobenzene-d5	*1460*	0	*1667*	0	*87.6*	*37-107*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy Rocky Mountain, LLC
Work Order: 1505262
Project: AP 21-20-695 Cuttings

QC BATCH REPORT

Batch ID: **70715** Instrument ID **SVMS5** Method: **SW846 8270D**

MS Sample ID: **1505007-13C MS** Units: **µg/Kg** Analysis Date: **5/6/2015 10:55 PM**
Client ID: Run ID: **SVMS5_150506A** SeqNo: **3263310** Prep Date: **5/6/2015** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	981.3	130	1283	0	76.5	45-110	0			
Anthracene	1110	130	1283	113.1	77.7	55-105	0			
Benzo(a)anthracene	1488	130	1283	389.2	85.7	50-110	0			
Benzo(a)pyrene	1822	130	1283	568.8	97.7	50-110	0			
Benzo(b)fluoranthene	1328	130	1283	372.6	74.5	45-115	0			
Benzo(g,h,i)perylene	1283	130	1283	222.9	82.6	40-125	0			
Benzo(k)fluoranthene	1482	130	1283	312.7	91.1	45-115	0			
Chrysene	1264	130	1283	312.7	74.1	55-110	0			
Dibenzo(a,h)anthracene	1385	130	1283	0	108	40-125	0			
Fluoranthene	1501	130	1283	602.1	70.1	55-115	0			
Fluorene	1020	130	1283	0	79.5	50-110	0			
Indeno(1,2,3-cd)pyrene	1591	130	1283	445.7	89.2	40-120	0			
Naphthalene	872.3	130	1283	0	68	40-105	0			
Pyrene	1494	130	1283	522.2	75.8	45-125	0			
Surr: 2-Fluorobiphenyl	*2155*	0	*3207*	0	*67.2*	*12-100*	0			
Surr: 4-Terphenyl-d14	*2604*	0	*3207*	0	*81.2*	*25-137*	0			
Surr: Nitrobenzene-d5	*2360*	0	*3207*	0	*73.6*	*37-107*	0			

MSD Sample ID: **1505007-13C MSD** Units: **µg/Kg** Analysis Date: **5/6/2015 11:17 PM**
Client ID: Run ID: **SVMS5_150506A** SeqNo: **3263311** Prep Date: **5/6/2015** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	962.6	130	1267	0	76	45-110	981.3	1.93	30	
Anthracene	1153	130	1267	113.1	82.1	55-105	1110	3.8	30	
Benzo(a)anthracene	1520	130	1267	389.2	89.3	50-110	1488	2.12	30	
Benzo(a)pyrene	1843	130	1267	568.8	101	50-110	1822	1.16	30	
Benzo(b)fluoranthene	1355	130	1267	372.6	77.6	45-115	1328	2.05	30	
Benzo(g,h,i)perylene	1203	130	1267	222.9	77.4	40-125	1283	6.4	30	
Benzo(k)fluoranthene	1501	130	1267	312.7	93.8	45-115	1482	1.29	30	
Chrysene	1267	130	1267	312.7	75.3	55-110	1264	0.237	30	
Dibenzo(a,h)anthracene	1381	130	1267	0	109	40-125	1385	0.353	30	
Fluoranthene	1495	130	1267	602.1	70.5	55-115	1501	0.424	30	
Fluorene	1039	130	1267	0	82	50-110	1020	1.82	30	
Indeno(1,2,3-cd)pyrene	1507	130	1267	445.7	83.8	40-120	1591	5.39	30	
Naphthalene	797.9	130	1267	0	63	40-105	872.3	8.91	30	
Pyrene	1469	130	1267	522.2	74.8	45-125	1494	1.7	30	
Surr: 2-Fluorobiphenyl	*2052*	0	*3166*	0	*64.8*	*12-100*	2155	*4.91*	*40*	
Surr: 4-Terphenyl-d14	*2875*	0	*3166*	0	*90.8*	*25-137*	2604	*9.89*	*40*	
Surr: Nitrobenzene-d5	*2197*	0	*3166*	0	*69.4*	*37-107*	2360	*7.15*	*40*	

The following samples were analyzed in this batch: 1505262-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy Rocky Mountain, LLC
Work Order: 1505262
Project: AP 21-20-695 Cuttings

QC BATCH REPORT

Batch ID: **70720** Instrument ID **VMS6** Method: **SW8260B**

MBLK Sample ID: **MBLK-70720-70720** Units: **µg/Kg** Analysis Date: **5/7/2015 05:32 PM**
Client ID: Run ID: **VMS6_150507A** SeqNo: **3265326** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	*1024*	0	*1000*	0	*102*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*905.5*	0	*1000*	0	*90.6*	*70-130*	0			
Surr: Dibromofluoromethane	*979.5*	0	*1000*	0	*98*	*70-130*	0			
Surr: Toluene-d8	*1026*	0	*1000*	0	*103*	*70-130*	0			

LCS Sample ID: **LCS-70720-70720** Units: **µg/Kg** Analysis Date: **5/7/2015 04:13 PM**
Client ID: Run ID: **VMS6_150507A** SeqNo: **3265323** Prep Date: **5/6/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	969	30	1000	0	96.9	75-125	0			
Ethylbenzene	1030	30	1000	0	103	75-125	0			
m,p-Xylene	2131	60	2000	0	107	80-125	0			
o-Xylene	1024	30	1000	0	102	75-125	0			
Toluene	1038	30	1000	0	104	70-125	0			
Xylenes, Total	3154	90	3000	0	105	75-125	0			
Surr: 1,2-Dichloroethane-d4	*981*	0	*1000*	0	*98.1*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*955*	0	*1000*	0	*95.5*	*70-130*	0			
Surr: Dibromofluoromethane	*972*	0	*1000*	0	*97.2*	*70-130*	0			
Surr: Toluene-d8	*1018*	0	*1000*	0	*102*	*70-130*	0			

The following samples were analyzed in this batch: 1505262-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy Rocky Mountain, LLC
Work Order: 1505262
Project: AP 21-20-695 Cuttings

QC BATCH REPORT

Batch ID: **70740** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

DUP Sample ID: **1505262-01A DUP** Units: **mmhos/cm @25°** Analysis Date: **5/8/2015 03:30 PM**
Client ID: **AP 21-20-695 cuttings** Run ID: **WETCHEM_150508P** SeqNo: **3266424** Prep Date: **5/8/2015** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	4.47	0.050	0	0	0		4.1	8.63	50	

The following samples were analyzed in this batch: 1505262-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy Rocky Mountain, LLC
Work Order: 1505262
Project: AP 21-20-695 Cuttings

QC BATCH REPORT

Batch ID: **70778** Instrument ID **WETCHEM** Method: **SW9045D**

LCS Sample ID: **LCS-70778-70778** Units: **s.u.** Analysis Date: **5/7/2015 11:00 AM**
Client ID: Run ID: **WETCHEM_150507F** SeqNo: **3263178** Prep Date: **5/7/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	4.03	0	4	0	101	90-110	0			

DUP Sample ID: **1505007-21C DUP** Units: **s.u.** Analysis Date: **5/7/2015 11:00 AM**
Client ID: Run ID: **WETCHEM_150507F** SeqNo: **3263180** Prep Date: **5/7/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.11	0	0	0	0	0-0	7.16	0.701	20	

DUP Sample ID: **1505268-02B DUP** Units: **s.u.** Analysis Date: **5/7/2015 11:00 AM**
Client ID: Run ID: **WETCHEM_150507F** SeqNo: **3263198** Prep Date: **5/7/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.51	0	0	0	0	0-0	8.57	0.703	20	

The following samples were analyzed in this batch: 1505262-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy Rocky Mountain, LLC
Work Order: 1505262
Project: AP 21-20-695 Cuttings

QC BATCH REPORT

Batch ID: **70861** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK Sample ID: **MBLK-70861-70861** Units: **mg/Kg** Analysis Date: **5/8/2015 11:00 AM**
Client ID: Run ID: **WETCHEM_150508K** SeqNo: **3266091** Prep Date: **5/7/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	ND	1.0								

LCS Sample ID: **LCS-70861-70861** Units: **mg/Kg** Analysis Date: **5/8/2015 11:00 AM**
Client ID: Run ID: **WETCHEM_150508K** SeqNo: **3266090** Prep Date: **5/7/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	4.78	1.0	5	0	95.6	80-120	0			

MS Sample ID: **1505268-02B MS** Units: **mg/Kg** Analysis Date: **5/8/2015 11:00 AM**
Client ID: Run ID: **WETCHEM_150508K** SeqNo: **3266085** Prep Date: **5/7/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	4.01	0.97	4.854	0.1165	80.2	75-125	0			

MS Sample ID: **1505268-02B MSI** Units: **mg/Kg** Analysis Date: **5/8/2015 11:00 AM**
Client ID: Run ID: **WETCHEM_150508K** SeqNo: **3266087** Prep Date: **5/7/2015** DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	2397	98	2145	0.1165	112	75-125	0			

MSD Sample ID: **1505268-02B MSD** Units: **mg/Kg** Analysis Date: **5/8/2015 11:00 AM**
Client ID: Run ID: **WETCHEM_150508K** SeqNo: **3266086** Prep Date: **5/7/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	4.218	0.99	4.95	0.1165	82.8	75-125	4.01	5.06	20	

The following samples were analyzed in this batch: 1505262-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: WPX Energy Rocky Mountain, LLC
Work Order: 1505262
Project: AP 21-20-695 Cuttings

QC BATCH REPORT

Batch ID: **R162894** Instrument ID **MOIST** Method: **E160.3M**

MBLK Sample ID: **WBLKS-R162894** Units: **% of sample** Analysis Date: **5/6/2015 07:50 PM**
Client ID: Run ID: **MOIST_150506E** SeqNo: **3262928** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.050								

LCS Sample ID: **LCS-R162894** Units: **% of sample** Analysis Date: **5/6/2015 07:50 PM**
Client ID: Run ID: **MOIST_150506E** SeqNo: **3262927** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.050	100	0	100	99.5-100.5	0			

DUP Sample ID: **1505268-01B DUP** Units: **% of sample** Analysis Date: **5/6/2015 07:50 PM**
Client ID: Run ID: **MOIST_150506E** SeqNo: **3262918** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	16.62	0.050	0	0	0		16.73	0.66	20	

The following samples were analyzed in this batch: 1505262-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Laboratory Group

HOLLAND, Michigan 49424

Chain-of-Custody

Form 202r8

WORKORDER # 1505262

PAGE 1 of 1

PROJECT NAME	AP 21-20-695 cuttings	SAMPLER		DATE	
PROJECT No.		SITE ID	AP 21-20-695 cuttings	TURNAROUND	24 hrs
		EDD FORMAT		DISPOSAL	By Lab or Return to Client
COMPANY NAME	WPX Energy	PURCHASE ORDER			
SEND REPORT TO	Blaney	BILL TO COMPANY	WPX Energy		
ADDRESS		INVOICE ATTN TO	Karolina Blaney; Leo Braun		
CITY / STATE / ZIP		ADDRESS	1058 Co Rd 215		
PHONE		CITY / STATE / ZIP	Parachure CO 81635		
FAX		PHONE	970-683-2295		
E-MAIL	Karolina.blaney@wpxenergy.com;	FAX			
		E-MAIL	Karolina.blaney@wpxenergy.com; leo.braun@wpxenergy.com		

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	910-1
1	AP 21-20-695 cuttings	S	5/4/2015	13:30	1		x	x

*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments:	QC PACKAGE (check below)	
4.8 @ 2	X	LEVEL II (Standard QC)
		LEVEL III (Std QC + forms)
		LEVEL IV (Std QC + forms + raw data)

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	Karolina Blaney	Karolina Blaney	5/4/2015	16:00:00 PM
RECEIVED BY			5-4-15	1730
RELINQUISHED BY				
RECEIVED BY		Diane F. Shea	5/6/15	1000
RELINQUISHED BY				
RECEIVED BY				

From: (616) 298-1033
Nick Martinez
ALS Environmental
127 E. 1st Street

PARACHUTE, CO 81635

Origin ID: RILA

FedEx Express

J15121502303uv

Ship Date: 04MAY15
ActWgt: 59.0 LB
CAD: 2264840/INET3610

Dims: 14 X 26 X 15 IN

Delivery Address Bar Code

Ref # 050415-1
Invoice #
PO # Parachute
Dept #

SHIP TO: (616) 399-6070 BILL SENDER

sample receiving
ALS Laboratory Group
3352 128TH AVE

HOLLAND, MI 49424

TUE - 05 MAY 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7735 2294 6282

XX HLMA

49424
MI-US
GRR

537J1/25E2/EE4B

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Name
ALS Parachute Custody Seal
Time 1100 Date 5-4-15
Name

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **WPX** Date/Time Received: **06-May-15 10:00**

Work Order: **1505262** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 06-May-15 (Date) Reviewed by: Chad Whelton (eSignature) 06-May-15 (Date)

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	4.8 c	SR2	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	5/6/2015 10:12:55 AM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

23-Mar-2015

Mark Mumby
HRL Compliance Solutions, Inc
2385 F 1/2 Road
Grand Junction, CO 81505

Re: **WPX AP 21-20 Rockwater Release 3.12.15** Work Order: **1503832**

Dear Mark,

ALS Environmental received 4 samples on 14-Mar-2015 10:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 26.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Chad Whelton

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Certificate No: MN 532786

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185
ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

ALS Group USA, Corp

Date: 23-Mar-15

Client: HRL Compliance Solutions, Inc
Project: WPX AP 21-20 Rockwater Release 3.12.15
Work Order: **1503832**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1503832-01	CS 01	Soil		3/12/2015 09:50	3/14/2015 10:30	☐
1503832-02	BKGD 01	Soil		3/12/2015 10:00	3/14/2015 10:30	☐
1503832-03	BKGD 02	Soil		3/12/2015 10:04	3/14/2015 10:30	☐
1503832-04	BKGD 03	Soil		3/12/2015 10:10	3/14/2015 10:30	☐

ALS Group USA, Corp

Date: 23-Mar-15

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and PQL, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	
s.u.	Standard Units

ALS Group USA, Corp

Date: *23-Mar-15*

Client: HRL Compliance Solutions, Inc
Project: WPX AP 21-20 Rockwater Release 3.12.15 **Work Order:** 1503832
Sample ID: BKGD 01 **Lab ID:** 1503832-02
Collection Date: 3/12/2015 10:00 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP			**SW846 6010C**		Prep: SW3050B / 3/18/15	Analyst: **JEC**
Arsenic	**180**		**0.84**	**mg/Kg-dry**	2	3/19/2015 08:38 PM
MOISTURE			**E160.3M**			Analyst: **EVB**
Moisture	**19**		**0.050**	**% of sample**	1	3/17/2015 05:15 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *23-Mar-15*

Client: HRL Compliance Solutions, Inc
Project: WPX AP 21-20 Rockwater Release 3.12.15 **Work Order:** 1503832
Sample ID: BKGD 02 **Lab ID:** 1503832-03
Collection Date: 3/12/2015 10:04 AM **Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP			**SW846 6010C**		Prep: SW3050B / 3/18/15	Analyst: **JEC**
Arsenic	**31**		**1.3**	**mg/Kg-dry**	2	3/19/2015 08:44 PM
MOISTURE			**E160.3M**			Analyst: **EVB**
Moisture	**36**		**0.050**	**% of sample**	1	3/17/2015 05:15 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *23-Mar-15*

Client: HRL Compliance Solutions, Inc
Project: WPX AP 21-20 Rockwater Release 3.12.15
Work Order: 1503832
Sample ID: BKGD 03
Lab ID: 1503832-04
Collection Date: 3/12/2015 10:10 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP			**SW846 6010C**		Prep: SW3050B / 3/18/15	Analyst: **JEC**
Arsenic	**31**		**1.2**	**mg/Kg-dry**	2	3/19/2015 08:49 PM
SOLUBLE CATIONS FOR SAR			**SW846 6010C**		Prep: USDA Method 20B / 3/19/15	Analyst: **JEC**
Calcium	**200**		**5.0**	**mg/L**	10	3/19/2015 02:32 PM
Magnesium	**40**		**2.0**	**mg/L**	10	3/19/2015 02:32 PM
Sodium	**5.3**		**2.0**	**mg/L**	10	3/19/2015 02:32 PM
SODIUM ADSORPTION RATIO			**USDA H60 METHO**		Prep: USDA Method 20B / 3/19/15	Analyst: **JEC**
Sodium Adsorption Ratio	**0.089**		**0.010**	**none**	1	3/19/2015
ELECTRICAL CONDUCTIVITY (SAR)			**USDA H60 METHO**		Prep: USDA Method 20B / 3/19/15	Analyst: **JB**
Electrical Conductivity @ Saturation	**1.4**		**0.050**	**mmhos/cm @2**	10	3/19/2015 04:00 PM
MOISTURE			**E160.3M**			Analyst: **EVB**
Moisture	**36**		**0.050**	**% of sample**	1	3/17/2015 05:15 PM
PH			**SW9045D**		Prep: EXTRACT / 3/17/15	Analyst: **JRF**
pH	**7.6**			**s.u.**	1	3/17/2015 04:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

QC BATCH REPORT

Batch ID: **68695** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-68695-68695** Units: **mg/Kg** Analysis Date: **3/17/2015 05:16 PM**

Client ID: Run ID: **GC8_150317A** SeqNo: **3182895** Prep Date: **3/17/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	5.0								
Surr: 4-Terphenyl-d14	*1.328*	0	*2*	0	*66.4*	*39-133*	0			

LCS Sample ID: **DLCSS1-68695-68695** Units: **mg/Kg** Analysis Date: **3/17/2015 05:46 PM**

Client ID: Run ID: **GC8_150317A** SeqNo: **3182896** Prep Date: **3/17/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	164.7	5.0	200	0	82.3	61-109	0			
Surr: 4-Terphenyl-d14	*1.122*	0	*2*	0	*56.1*	*39-133*	0			

MS Sample ID: **1503762-06B MS** Units: **mg/Kg** Analysis Date: **3/17/2015 06:46 PM**

Client ID: Run ID: **GC8_150317A** SeqNo: **3182897** Prep Date: **3/17/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	298.3	8.1	325.7	45.17	77.7	48-110	0			
Surr: 4-Terphenyl-d14	*2.013*	0	*3.257*	0	*61.8*	*39-133*	0			

MSD Sample ID: **1503762-06B MSD** Units: **mg/Kg** Analysis Date: **3/17/2015 07:16 PM**

Client ID: Run ID: **GC8_150317A** SeqNo: **3182898** Prep Date: **3/17/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	291.2	7.9	318	45.17	77.4	48-110	298.3	2.39	30	
Surr: 4-Terphenyl-d14	*1.921*	0	*3.18*	0	*60.4*	*39-133*	2.013	*4.7*	*30*	

The following samples were analyzed in this batch: 1503832-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 1503832
Project: WPX AP 21-20 Rockwater Release 3.12.15

QC BATCH REPORT

Batch ID: **68657a** Instrument ID **GC9** Method: **SW8015D**

MBLK Sample ID: **MBLK-68657-68657a** Units: **µg/Kg** Analysis Date: **3/16/2015 07:29 PM**
Client ID: Run ID: **GC9_150316A** SeqNo: **3180048** Prep Date: **3/16/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
Surr: Toluene-d8	*4918*	0	*5000*	0	*98.4*	*50-150*	0			

LCS Sample ID: **LCS-68657-68657a** Units: **µg/Kg** Analysis Date: **3/16/2015 06:38 PM**
Client ID: Run ID: **GC9_150316A** SeqNo: **3180047** Prep Date: **3/16/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	448300	2,500	500000	0	89.7	70-130	0			
Surr: Toluene-d8	*4550*	0	*5000*	0	*91*	*50-150*	0			

MS Sample ID: **1503832-01A MS** Units: **µg/Kg** Analysis Date: **3/17/2015 01:47 AM**
Client ID: **CS 01** Run ID: **GC9_150316A** SeqNo: **3180052** Prep Date: **3/16/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	423400	2,500	500000	0	84.7	70-130	0			
Surr: Toluene-d8	*4873*	0	*5000*	0	*97.5*	*50-150*	0			

MSD Sample ID: **1503832-01A MSD** Units: **µg/Kg** Analysis Date: **3/17/2015 02:12 AM**
Client ID: **CS 01** Run ID: **GC9_150316A** SeqNo: **3180054** Prep Date: **3/16/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	424600	2,500	500000	0	84.9	70-130	423400	0.292	30	
Surr: Toluene-d8	*4404*	0	*5000*	0	*88.1*	*50-150*	4873	*10.1*	*30*	

The following samples were analyzed in this batch: 1503832-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 1503832
Project: WPX AP 21-20 Rockwater Release 3.12.15

QC BATCH REPORT

Batch ID: **68754** Instrument ID **HG1** Method: **SW7471B**

MBLK Sample ID: **MBLK-68754-68754** Units: **mg/Kg** Analysis Date: **3/18/2015 02:17 PM**
Client ID: Run ID: **HG1_150318A** SeqNo: **3184183** Prep Date: **3/18/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.020								

LCS Sample ID: **LCS-68754-68754** Units: **mg/Kg** Analysis Date: **3/18/2015 02:19 PM**
Client ID: Run ID: **HG1_150318A** SeqNo: **3184185** Prep Date: **3/18/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1758	0.020	0.1665	0	106	80-120	0			

MS Sample ID: **1503768-02CMS** Units: **mg/Kg** Analysis Date: **3/18/2015 02:26 PM**
Client ID: Run ID: **HG1_150318A** SeqNo: **3184191** Prep Date: **3/18/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1295	0.012	0.1038	0.0193	106	75-125	0			

MSD Sample ID: **1503768-02CMSD** Units: **mg/Kg** Analysis Date: **3/18/2015 02:28 PM**
Client ID: Run ID: **HG1_150318A** SeqNo: **3184192** Prep Date: **3/18/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.132	0.013	0.1052	0.0193	107	75-125	0.1295	1.94	35	

The following samples were analyzed in this batch: 1503832-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 1503832
Project: WPX AP 21-20 Rockwater Release 3.12.15

QC BATCH REPORT

Batch ID: **68750** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK Sample ID: **MBLK-68750-68750** Units: **mg/L** Analysis Date: **3/19/2015 06:59 PM**
Client ID: Run ID: **ICP2_150319A** SeqNo: **3186398** Prep Date: **3/18/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.50								
Chromium	0.01504	0.25								J
Copper	0.02986	0.50								J
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.50								
Silver	ND	0.25								
Zinc	0.1387	0.50								J

LCS Sample ID: **LCS-68750-68750** Units: **mg/L** Analysis Date: **3/19/2015 07:05 PM**
Client ID: Run ID: **ICP2_150319A** SeqNo: **3186399** Prep Date: **3/18/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.87	0.25	5	0	97.4	80-120	0			
Barium	4.734	0.25	5	0	94.7	80-120	0			
Cadmium	4.706	0.50	5	0	94.1	80-120	0			
Chromium	5.146	0.25	5	0	103	80-120	0			
Copper	5.292	0.50	5	0	106	80-120	0			
Lead	5.059	0.25	5	0	101	80-120	0			
Nickel	5.019	0.25	5	0	100	80-120	0			
Selenium	4.777	0.50	5	0	95.5	80-120	0			
Silver	5.399	0.25	5	0	108	80-120	0			
Zinc	5.186	0.50	5	0	104	80-120	0			

MS Sample ID: **1503833-02AMS** Units: **mg/Kg** Analysis Date: **3/19/2015 09:23 PM**
Client ID: Run ID: **ICP2_150319A** SeqNo: **3186446** Prep Date: **3/18/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	12.61	0.32	6.427	5.792	106	75-125	0			
Barium	160.6	0.32	6.427	156.1	68.9	75-125	0			SO
Cadmium	6.333	0.64	6.427	0.02144	98.2	75-125	0			
Chromium	22.06	0.32	6.427	15.47	103	75-125	0			
Copper	22.16	0.64	6.427	15.95	96.6	75-125	0			
Lead	17.91	0.32	6.427	12.02	91.6	75-125	0			
Nickel	20.55	0.32	6.427	15.08	85.2	75-125	0			
Selenium	5.871	0.64	6.427	-0.6706	102	75-125	0			
Silver	7.751	0.32	6.427	-0.1355	123	75-125	0			
Zinc	60.92	0.64	6.427	51.94	140	75-125	0			SO

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 1503832
Project: WPX AP 21-20 Rockwater Release 3.12.15

QC BATCH REPORT

Batch ID: **68750** Instrument ID **ICP2** Method: **SW846 6010C**

MS Sample ID: **1503833-02AMS** Units: **mg/Kg** Analysis Date: **3/20/2015 03:26 PM**
Client ID: Run ID: **ICP2_150320A** SeqNo: **3187980** Prep Date: **3/18/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Selenium	5.837	0.64	6.427	-0.5849	99.9	75-125	0			

MSD Sample ID: **1503833-02AMSD** Units: **mg/Kg** Analysis Date: **3/19/2015 09:28 PM**
Client ID: Run ID: **ICP2_150319A** SeqNo: **3186447** Prep Date: **3/18/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	12.86	0.32	6.402	5.792	110	75-125	12.61	1.97	20	
Barium	165.6	0.32	6.402	156.1	147	75-125	160.6	3.07	20	SO
Cadmium	6.272	0.64	6.402	0.02144	97.6	75-125	6.333	0.964	20	
Chromium	22.94	0.32	6.402	15.47	117	75-125	22.06	3.9	20	
Copper	22.45	0.64	6.402	15.95	102	75-125	22.16	1.32	20	
Lead	17.72	0.32	6.402	12.02	89.1	75-125	17.91	1.03	20	
Nickel	20.95	0.32	6.402	15.08	91.6	75-125	20.55	1.89	20	
Selenium	5.797	0.64	6.402	-0.6706	101	75-125	5.871	1.28	20	
Silver	7.909	0.32	6.402	-0.1355	126	75-125	7.751	2.02	20	S
Zinc	61.66	0.64	6.402	51.94	152	75-125	60.92	1.2	20	SO

MSD Sample ID: **1503833-02AMSD** Units: **mg/Kg** Analysis Date: **3/20/2015 03:31 PM**
Client ID: Run ID: **ICP2_150320A** SeqNo: **3187981** Prep Date: **3/18/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Selenium	5.961	0.64	6.402	-0.5849	102	75-125	5.837	2.1	20	

The following samples were analyzed in this batch: 1503832-01B 1503832-02A 1503832-03A 1503832-04A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 1503832
Project: WPX AP 21-20 Rockwater Release 3.12.15

QC BATCH REPORT

Batch ID: **68773** Instrument ID **ICP2** Method: **SW846 6010C**

DUP Sample ID: **1503898-01ADUP** Units: **mg/L** Analysis Date: **3/19/2015 03:11 PM**
Client ID: Run ID: **ICP2_150319A** SeqNo: **3185811** Prep Date: **3/19/2015** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	424.8	5.0	0	0	0	0-0	439.5	3.42		
Magnesium	139.3	2.0	0	0	0	0-0	144.9	3.92		
Sodium	2083	2.0	0	0	0	0-0	2152	3.23		

DUP Sample ID: **1503898-01ADUP** Units: **none** Analysis Date: **3/19/2015**
Client ID: Run ID: **SAR_150319A** SeqNo: **3185887** Prep Date: **3/19/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	22.42	0.010	0	0	0		22.75	1.44	50	

The following samples were analyzed in this batch: 1503832-01C 1503832-04B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 1503832
Project: WPX AP 21-20 Rockwater Release 3.12.15

QC BATCH REPORT

Batch ID: **68802** Instrument ID **SVMS8** Method: **SW846 8270D**

MBLK Sample ID: **SBLKS1-68802-68802** Units: **µg/Kg** Analysis Date: **3/19/2015 04:45 PM**
Client ID: Run ID: **SVMS8_150319A** SeqNo: **3187574** Prep Date: **3/19/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	ND	6.7								
Acenaphthylene	ND	6.7								
Anthracene	ND	6.7								
Benzo(a)anthracene	ND	6.7								
Benzo(a)pyrene	ND	6.7								
Benzo(b)fluoranthene	ND	6.7								
Benzo(g,h,i)perylene	ND	6.7								
Benzo(k)fluoranthene	ND	6.7								
Chrysene	ND	6.7								
Dibenzo(a,h)anthracene	ND	6.7								
Fluoranthene	ND	6.7								
Fluorene	ND	6.7								
Indeno(1,2,3-cd)pyrene	ND	6.7								
Naphthalene	ND	6.7								
Pyrene	ND	6.7								
Surr: 2-Fluorobiphenyl	*1320*	0	*1667*	0	*79.2*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1680*	0	*1667*	0	*101*	*25-137*	0			
Surr: Nitrobenzene-d5	*1463*	0	*1667*	0	*87.8*	*37-107*	0			

LCS Sample ID: **SLCSS1-68802-68802** Units: **µg/Kg** Analysis Date: **3/19/2015 05:05 PM**
Client ID: Run ID: **SVMS8_150319A** SeqNo: **3187575** Prep Date: **3/19/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	524	6.7	666.7	0	78.6	45-110	0			
Acenaphthylene	573.7	6.7	666.7	0	86	45-105	0			
Anthracene	612.3	6.7	666.7	0	91.8	55-105	0			
Benzo(a)anthracene	624.7	6.7	666.7	0	93.7	50-110	0			
Benzo(a)pyrene	647.7	6.7	666.7	0	97.1	50-110	0			
Benzo(b)fluoranthene	650.3	6.7	666.7	0	97.5	45-115	0			
Benzo(g,h,i)perylene	616.7	6.7	666.7	0	92.5	40-125	0			
Benzo(k)fluoranthene	660.7	6.7	666.7	0	99.1	45-115	0			
Chrysene	617.7	6.7	666.7	0	92.6	55-110	0			
Dibenzo(a,h)anthracene	622.7	6.7	666.7	0	93.4	40-125	0			
Fluoranthene	624.3	6.7	666.7	0	93.6	55-115	0			
Fluorene	538.3	6.7	666.7	0	80.7	50-110	0			
Indeno(1,2,3-cd)pyrene	640.3	6.7	666.7	0	96	40-120	0			
Naphthalene	517.3	6.7	666.7	0	77.6	40-105	0			
Pyrene	649.7	6.7	666.7	0	97.4	45-125	0			
Surr: 2-Fluorobiphenyl	*1299*	0	*1667*	0	*77.9*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1629*	0	*1667*	0	*97.7*	*25-137*	0			
Surr: Nitrobenzene-d5	*1510*	0	*1667*	0	*90.6*	*37-107*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **68802** Instrument ID **SVMS8** Method: **SW846 8270D**

MS Sample ID: **1503770-21A MS** Units: **µg/Kg** Analysis Date: **3/19/2015 06:37 PM**
Client ID: Run ID: **SVMS8_150319A** SeqNo: **3187578** Prep Date: **3/19/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1071	13	1301	0	82.3	45-110	0			
Acenaphthylene	1162	13	1301	4.215	88.9	45-105	0			
Anthracene	1205	13	1301	7.458	92	55-105	0			
Benzo(a)anthracene	1217	13	1301	30.81	91.2	50-110	0			
Benzo(a)pyrene	1309	13	1301	43.45	97.3	50-110	0			
Benzo(b)fluoranthene	1377	13	1301	52.86	102	45-115	0			
Benzo(g,h,i)perylene	1356	13	1301	49.29	100	40-125	0			
Benzo(k)fluoranthene	1252	13	1301	17.19	94.9	45-115	0			
Chrysene	1197	13	1301	29.83	89.7	55-110	0			
Dibenzo(a,h)anthracene	1350	13	1301	9.404	103	40-125	0			
Fluoranthene	1245	13	1301	53.83	91.6	55-115	0			
Fluorene	1088	13	1301	0	83.6	50-110	0			
Indeno(1,2,3-cd)pyrene	1387	13	1301	41.83	103	40-120	0			
Naphthalene	1086	13	1301	6.81	82.9	40-105	0			
Pyrene	1362	13	1301	55.77	100	45-125	0			
Surr: 2-Fluorobiphenyl	*2664*	0	*3254*	0	*81.9*	*12-100*	0			
Surr: 4-Terphenyl-d14	*3204*	0	*3254*	0	*98.5*	*25-137*	0			
Surr: Nitrobenzene-d5	*3104*	0	*3254*	0	*95.4*	*37-107*	0			

MSD Sample ID: **1503770-21A MSD** Units: **µg/Kg** Analysis Date: **3/19/2015 06:57 PM**
Client ID: Run ID: **SVMS8_150319A** SeqNo: **3187579** Prep Date: **3/19/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1023	13	1327	0	77.1	45-110	1071	4.54	30	
Acenaphthylene	1165	13	1327	4.215	87.5	45-105	1162	0.28	30	
Anthracene	1226	13	1327	7.458	91.8	55-105	1205	1.7	30	
Benzo(a)anthracene	1292	13	1327	30.81	95.1	50-110	1217	5.95	30	
Benzo(a)pyrene	1367	13	1327	43.45	99.8	50-110	1309	4.32	30	
Benzo(b)fluoranthene	1382	13	1327	52.86	100	45-115	1377	0.394	30	
Benzo(g,h,i)perylene	1414	13	1327	49.29	103	40-125	1356	4.19	30	
Benzo(k)fluoranthene	1334	13	1327	17.19	99.2	45-115	1252	6.34	30	
Chrysene	1263	13	1327	29.83	92.9	55-110	1197	5.39	30	
Dibenzo(a,h)anthracene	1390	13	1327	9.404	104	40-125	1350	2.93	30	
Fluoranthene	1269	13	1327	53.83	91.6	55-115	1245	1.87	30	
Fluorene	1109	13	1327	0	83.6	50-110	1088	1.92	30	
Indeno(1,2,3-cd)pyrene	1475	13	1327	41.83	108	40-120	1387	6.14	30	
Naphthalene	1010	13	1327	6.81	75.6	40-105	1086	7.3	30	
Pyrene	1441	13	1327	55.77	104	45-125	1362	5.62	30	
Surr: 2-Fluorobiphenyl	*2550*	0	*3317*	0	*76.9*	*12-100*	2664	*4.36*	*40*	
Surr: 4-Terphenyl-d14	*3439*	0	*3317*	0	*104*	*25-137*	3204	*7.06*	*40*	
Surr: Nitrobenzene-d5	*2988*	0	*3317*	0	*90.1*	*37-107*	3104	*3.82*	*40*	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 1503832
Project: WPX AP 21-20 Rockwater Release 3.12.15

QC BATCH REPORT

Batch ID: **68802** Instrument ID **SVMS8** Method: **SW846 8270D**

The following samples were analyzed in this batch: 1503832-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **68655** Instrument ID **VMS5** Method: **SW8260B**

MBLK Sample ID: **MBLK-68655-68655** Units: **µg/Kg** Analysis Date: **3/16/2015 01:40 PM**
Client ID: Run ID: **VMS5_150316A** SeqNo: **3180326** Prep Date: **3/16/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	*1020*	0	*1000*	0	*102*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*967.5*	0	*1000*	0	*96.8*	*70-130*	0			
Surr: Dibromofluoromethane	*1009*	0	*1000*	0	*101*	*70-130*	0			
Surr: Toluene-d8	*1009*	0	*1000*	0	*101*	*70-130*	0			

LCS Sample ID: **LCS-68655-68655** Units: **µg/Kg** Analysis Date: **3/16/2015 12:22 PM**
Client ID: Run ID: **VMS5_150316A** SeqNo: **3180324** Prep Date: **3/16/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1046	30	1000	0	105	75-125	0			
Ethylbenzene	1120	30	1000	0	112	75-125	0			
m,p-Xylene	2228	60	2000	0	111	80-125	0			
o-Xylene	1098	30	1000	0	110	75-125	0			
Toluene	1076	30	1000	0	108	70-125	0			
Xylenes, Total	3326	90	3000	0	111	75-125	0			
Surr: 1,2-Dichloroethane-d4	*980*	0	*1000*	0	*98*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1006*	0	*1000*	0	*101*	*70-130*	0			
Surr: Dibromofluoromethane	*988.5*	0	*1000*	0	*98.8*	*70-130*	0			
Surr: Toluene-d8	*1015*	0	*1000*	0	*102*	*70-130*	0			

MS Sample ID: **1503834-16A MS** Units: **µg/Kg** Analysis Date: **3/18/2015 01:04 PM**
Client ID: Run ID: **VMS5_150317B** SeqNo: **3183256** Prep Date: **3/16/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	955.5	30	1000	0	95.6	75-125	0			
Ethylbenzene	992.5	30	1000	0	99.2	75-125	0			
m,p-Xylene	2012	60	2000	0	101	80-125	0			
o-Xylene	978.5	30	1000	0	97.8	75-125	0			
Toluene	962.5	30	1000	0	96.2	70-125	0			
Xylenes, Total	2991	90	3000	0	99.7	75-125	0			
Surr: 1,2-Dichloroethane-d4	*1004*	0	*1000*	0	*100*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*993*	0	*1000*	0	*99.3*	*70-130*	0			
Surr: Dibromofluoromethane	*989*	0	*1000*	0	*98.9*	*70-130*	0			
Surr: Toluene-d8	*993*	0	*1000*	0	*99.3*	*70-130*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 1503832
Project: WPX AP 21-20 Rockwater Release 3.12.15

QC BATCH REPORT

Batch ID: **68655** Instrument ID **VMS5** Method: **SW8260B**

MSD Sample ID: **1503834-16A MSD** Units: **µg/Kg** Analysis Date: **3/18/2015 01:29 PM**
Client ID: Run ID: **VMS5_150317B** SeqNo: **3183257** Prep Date: **3/16/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	966	30	1000	0	96.6	75-125	955.5	1.09	30	
Ethylbenzene	1033	30	1000	0	103	75-125	992.5	4	30	
m,p-Xylene	2076	60	2000	0	104	80-125	2012	3.08	30	
o-Xylene	1013	30	1000	0	101	75-125	978.5	3.46	30	
Toluene	954.5	30	1000	0	95.4	70-125	962.5	0.835	30	
Xylenes, Total	3088	90	3000	0	103	75-125	2991	3.21	30	
Surr: 1,2-Dichloroethane-d4	*997.5*	0	*1000*	0	*99.8*	*70-130*	1004	*0.699*	*30*	
Surr: 4-Bromofluorobenzene	*1006*	0	*1000*	0	*101*	*70-130*	993	*1.3*	*30*	
Surr: Dibromofluoromethane	*989.5*	0	*1000*	0	*99*	*70-130*	989	*0.0505*	*30*	
Surr: Toluene-d8	*1006*	0	*1000*	0	*101*	*70-130*	993	*1.25*	*30*	

The following samples were analyzed in this batch: 1503832-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 1503832
Project: WPX AP 21-20 Rockwater Release 3.12.15

QC BATCH REPORT

Batch ID: **68717** Instrument ID **WETCHEM** Method: **SW9045D**

LCS Sample ID: **LCS-68717-68717** Units: **s.u.** Analysis Date: **3/17/2015 04:00 PM**
Client ID: Run ID: **WETCHEM_150317M** SeqNo: **3181743** Prep Date: **3/17/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	3.95	0	4	0	98.8	90-110	0			

DUP Sample ID: **1503833-04A DUP** Units: **s.u.** Analysis Date: **3/17/2015 04:00 PM**
Client ID: Run ID: **WETCHEM_150317M** SeqNo: **3181754** Prep Date: **3/17/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7	0	0	0	0	0-0	7.15	2.12	20	

DUP Sample ID: **1503886-05B DUP** Units: **s.u.** Analysis Date: **3/17/2015 04:00 PM**
Client ID: Run ID: **WETCHEM_150317M** SeqNo: **3181763** Prep Date: **3/17/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.87	0	0	0	0	0-0	7.88	0.127	20	H

The following samples were analyzed in this batch: 1503832-01B 1503832-04A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 1503832
Project: WPX AP 21-20 Rockwater Release 3.12.15

QC BATCH REPORT

Batch ID: **68773** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

DUP Sample ID: **1503898-01A DUP** Units: **mmhos/cm @25°** Analysis Date: **3/19/2015 04:00 PM**
Client ID: Run ID: **WETCHEM_150319O** SeqNo: **3185933** Prep Date: **3/19/2015** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	15.09	0.050	0	0	0		15.62	3.45	50	

The following samples were analyzed in this batch: 1503832-01C 1503832-04B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 1503832
Project: WPX AP 21-20 Rockwater Release 3.12.15

QC BATCH REPORT

Batch ID: **68890** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK Sample ID: **MBLK-68890-68890** Units: **mg/Kg** Analysis Date: **3/20/2015 04:00 PM**
Client ID: Run ID: **WETCHEM_150320N** SeqNo: **3188483** Prep Date: **3/19/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	ND	1.0								

LCS Sample ID: **LCS-68890-68890** Units: **mg/Kg** Analysis Date: **3/20/2015 04:00 PM**
Client ID: Run ID: **WETCHEM_150320N** SeqNo: **3188482** Prep Date: **3/19/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	5.04	1.0	5	0	101	80-120	0			

MS Sample ID: **1503832-01B MS** Units: **mg/Kg** Analysis Date: **3/20/2015 04:00 PM**
Client ID: **CS 01** Run ID: **WETCHEM_150320N** SeqNo: **3188468** Prep Date: **3/19/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	4.346	0.93	4.673	0.1101	90.6	75-125	0			

MS Sample ID: **1503832-01B MSI** Units: **mg/Kg** Analysis Date: **3/20/2015 04:00 PM**
Client ID: **CS 01** Run ID: **WETCHEM_150320N** SeqNo: **3188470** Prep Date: **3/19/2015** DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	2963	93	3203	0.1101	92.5	75-125	0			

MSD Sample ID: **1503832-01B MSD** Units: **mg/Kg** Analysis Date: **3/20/2015 04:00 PM**
Client ID: **CS 01** Run ID: **WETCHEM_150320N** SeqNo: **3188469** Prep Date: **3/19/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	4.109	0.91	4.545	0.1101	88	75-125	4.346	5.6	20	

The following samples were analyzed in this batch: 1503832-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 1503832
Project: WPX AP 21-20 Rockwater Release 3.12.15

QC BATCH REPORT

Batch ID: **R159371** Instrument ID **MOIST** Method: **E160.3M**

MBLK Sample ID: **WBLKS-R159371** Units: **% of sample** Analysis Date: **3/17/2015 05:15 PM**
Client ID: Run ID: **MOIST_150317B** SeqNo: **3182824** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	0.03	0.050								J

LCS Sample ID: **LCS-R159371** Units: **% of sample** Analysis Date: **3/17/2015 05:15 PM**
Client ID: Run ID: **MOIST_150317B** SeqNo: **3182822** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.050	100	0	100	99.5-100.5	0			

DUP Sample ID: **1503760-01A DUP** Units: **% of sample** Analysis Date: **3/17/2015 05:15 PM**
Client ID: Run ID: **MOIST_150317B** SeqNo: **3182788** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	7.44	0.050	0	0	0		6.4	15	20	

DUP Sample ID: **1503832-01B DUP** Units: **% of sample** Analysis Date: **3/17/2015 05:15 PM**
Client ID: **CS 01** Run ID: **MOIST_150317B** SeqNo: **3182804** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	22.89	0.050	0	0	0		20.2	12.5	20	

The following samples were analyzed in this batch: 1503832-01B 1503832-02A 1503832-03A 1503832-04A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

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Chain of Custody Form

Page ____ of ____

COC ID: 13069

ALS Project Manager: | ALS Work Order #: 1503832

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	WPX AP 21-20 HR BACKWATER RELEASE	A	DRO
Work Order		Project Number		B	GRO
Company Name	HRL COMPLIANCE SOLUTIONS	Bill To Company	HRL	C	BTEX
Send Report To	MARK MUMBY	Invoice Attn		D	METALS (TABLE 910-1) AS ONLY ON #2, 3 + 4
Address	2385 F½ RD.	Address		E	PAH
				F	SAR, EC, pH
City/State/Zip	GRAND JCT., CO., 81505	City/State/Zip		G	
Phone	970-243-3271	Phone		H	
Fax		Fax		I	
e-Mail Address	mmumby@hrlcomp.com	e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	CS 01	3-12-15	950	SOIL	8	3	X	X	X	X	X	X					
2	BKGD 01	|	1000	|	|	1				X							
3	BKGD 02	|	1004	|	|	1				X							
4	BKGD 03	|	1010	|	|	2				X		X					
5																		
6																		
7																		
8																		
9																		
10																		

Sampler(s) Please Print & Sign: CASEY RICHARDSON

Shipment Method:

Required Turnaround Time: (Check Box) ☐ Other ____ ☒ STD 10 Wk Days ☐ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour

Results Due Date:

	Date:	Time:		
Relinquished by:	3-12-15		Received by:	
Relinquished by:	3-17-15	1500	Received by (Laboratory):	3/14/15 1030
Received by (Laboratory): DES	3/16/15	0900	Checked by (Laboratory):	

Notes:

Cooler ID	Cooler Temp
	4.2°C

QC Package: (Check One Box Below)
☒ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other ____

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
Chain of Custody is a legal document. All information must be completed accurately.

From: (616) 298-1033
Nick Martinez -
ALS Environmental
127 E. 1st Street

PARACHUTE, CO 81635

Origin ID: RILA

FedEx Express

J15121502303uv

Ship Date: 12MAR15
ActWgt: 58.0 LB
CAD: 2264840/INET3610

Dims: 24 X 15 X 15 IN

Delivery Address Bar Code

Ref # 031215-1
Invoice #
PO # Parachute
Dept #

SHIP TO: (616) 399-6070

BILL SENDER

sample receiving
ALS Laboratory Group
3352 128TH AVE

HOLLAND, MI 49424

3 of 3

MPS# 7731 1711 8030

0263

Mstr# 7731 1711 7836

0201

FRI - 13 MAR 10:30A
PRIORITY OVERNIGHT

XX HLMA

49424
MI-US
GRR

537J1/879/AEE4B

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service condition[illegible]current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package[illegible]sult of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional[illegible]actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover[illegible]including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other[illegible]ncidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Re[illegible]d loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable[illegible]ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

ALS Parachute Custody Seal
Time 3:45 Date 3-12
Name [illegible]

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **HRL** Date/Time Received: **14-Mar-15 10:30**

Work Order: **1503832** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 16-Mar-15 (Date) Reviewed by: Tom Bramish (eSignature) 16-Mar-15 (Date)

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	4.2 c	SR2	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	3/16/2015 9:10:38 AM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction: